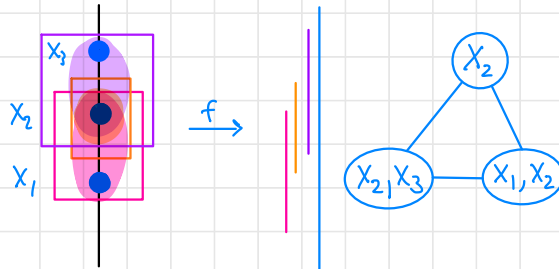"Standard Software Parameters" i.e. constraints:
- lens function is a projection function
- reference space: $\mathbb{R}$
- cover: at most $|X|$ intervals, & intervals are over-lapping
- clustering algorithm produces hard clusters

With these constraints, we can get a Mapper graph as a △ for $X = \vdots$

<u>But</u>, if we only accept non-trivial clusters, so the constraints
are:
- lens function is a projection function
- reference space: $\mathbb{R}$
- cover: at most $|X|$ intervals, & intervals are over-lapping
- clustering algorithm is non-trivial, so it's based on
  some criteria (like distance.)

then we cannot get a Mapper graph as a △ for $X = \vdots$

Example of a fail